

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0040] on page 8 with the following:

--[0040] While the computer controller 20 may be used to control the components and subcomponents of the system 10, it is also envisioned that the computer controller 20 also be configured to control a mechanical loading means or mechanism 30 (~~not shown~~) for loading the bioartificial tissue 14 in the culture well 12. Accordingly, the mechanical loading mechanism 30 would not require a separate control device, and now would be the system 10 of the present invention. Therefore, the computer controller 20, as discussed in more detail herein, could be used as a central control mechanism for not only the system 10 but ancillary systems and additional testing, monitoring and analytical systems.--